

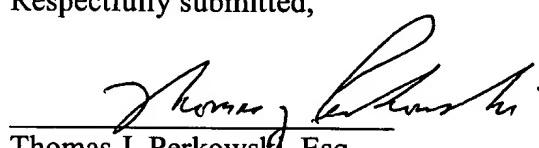
REMARKS

The proposed Amendments to the Specification have been provided to ensure correspondence between the Specification and the Formal Drawings filed herewith.

The Commissioner is hereby authorized to charge any fee deficiencies or credit any overpayments to Deposit Account 16-1340.

Respectfully submitted,

Dated: July 16, 2004


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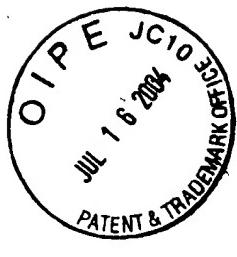
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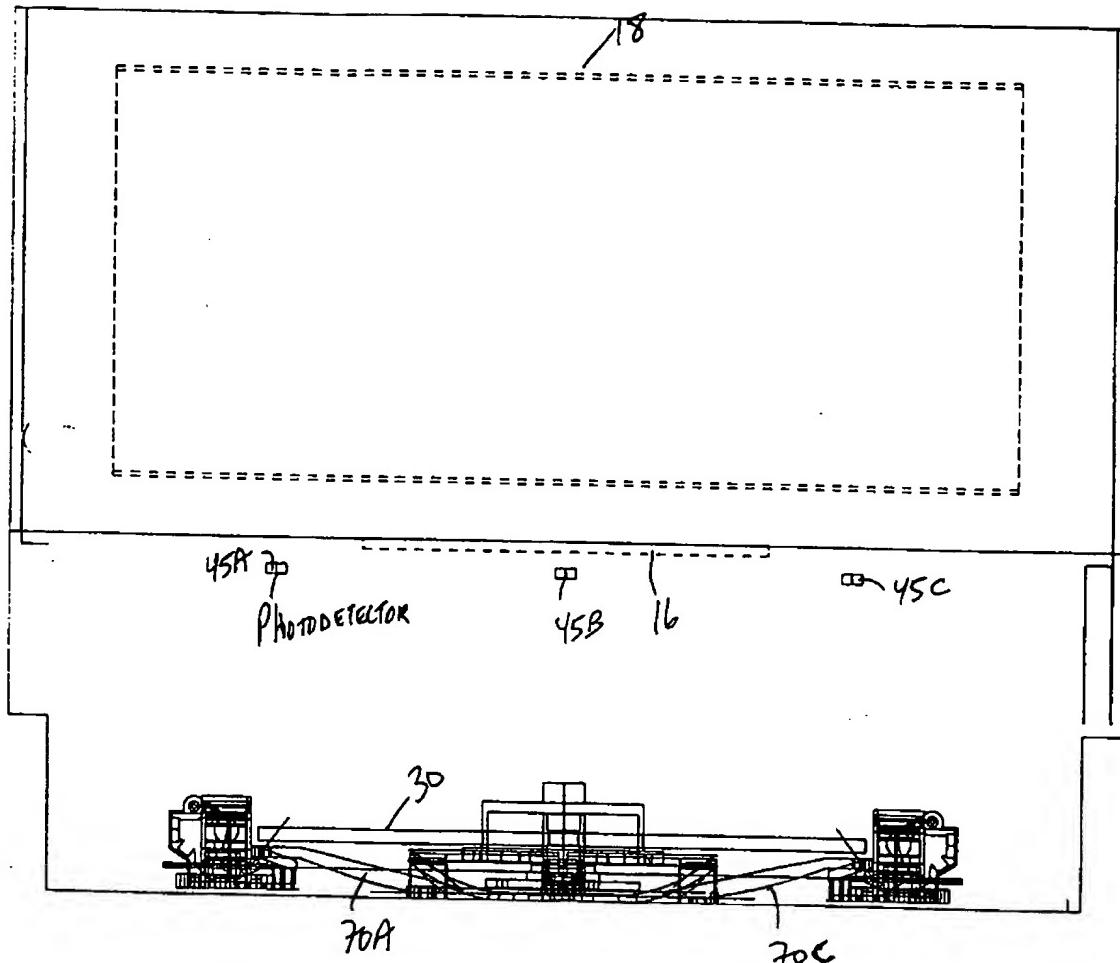
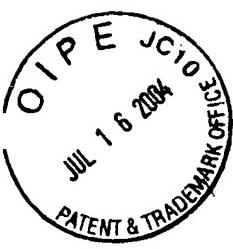


FIG. 2I1

2I



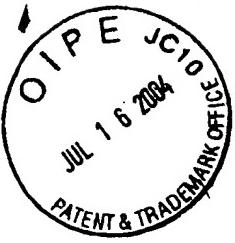
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Dependent Parameters for both the Scanner and the Disk		Disk Shift	48
Box height (inches);	NA	Problem items are highlighted (red).	(See Note 1)
Box width (inches);	NA		(See Note 2)
Max angle B (degrees);	62.00 (See Note 3)		
Min angle B (degrees);	38.00 (See Note 3)		
Total facet angular sweep (degrees);	358.14 (See Note 4)		
	0.00 (See Note 6)		
Min (angle A - angle B) (degrees);	197.04		
Max beam speed (inches per second);	7158		
Min beam speed (inches per second);	872		
Power at data detector (mW);	5.47 (See Note 7)	Max bandwidth (MHz) for	7.5 ml bars
Signal voltage (volts);	3.45 (See Note 7)		
Signal voltage at max DOF limits (volts);			
Class 2A?	Pulse Class 2?		
COINR:	YES	(See Note 8)	
Pavg. Class 2?	YES		
IEC:	Single pulse	Pulse train correction	
	P-AVG: 0.250	PASS	
	PASS	PASS	
Note 1: If this entry is highlighted (red) then the value exceeds the specified value for the box height (Cell G21). Go to cell G417 to G458 to identify the problem entries and make the necessary inner radius adjustments in Cells G215 to G254.			
Note 2: This entry is not used in the box design, but it gives an indication of the box dimensions that would be established by the width of the tape of the mirrors.			
Note 3: Generally, the B angles should range between 40 degrees and 70 degrees. Holograms with smaller or larger angles may be difficult to construct.			
Note 4: This entry must be less than, but within a few degrees of, 360 degrees. To satisfy this requirement, it may be necessary to make adjustments to the focal distances and/or the length of the scan lines.			
Note 6: This value must be greater than 0.5 degrees to avoid feedback into the laser from disk surface reflections. If it is too small, adjustments must be made to the B angles of the problem facets (See Cells X468 to X507).			
Note 7: The signal voltage must be greater than some value established by the signal processor requirements. Typically, this value should be greater than 2 volts. If this value is less than 2 volts, either the laser power must be increased or the focal distances must be decreased.			
Note 8: All CDRH/MEC entries must be YES or PASS. If no laser power must be reduced. (Modify laser power in Cell B798.)			



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d = distance from click to base of scanner (inches):

d = distance from disk to base of scanner (inches):										Maximum Collection Area (ignoring notch)	
Rotational speed of disk (rpm)										(sq. in.)	
DiskStratos 4.0e											
Direction	Geometrical Focal length (inches)	Angle A (degrees) Given	Angle B (degrees) Given	Angle of Diffraction (degrees)	Focal plane scan line length (inches)	Scan Angle (degrees)	Scan multi. Factor (m)	Rotation Angle (degrees)	Accounting for dead time for laser beam	Light Collection Factor	Light Collection Area
1	12.5	12.73	52.00	52.00	9.750	42.61	1.62	26.24	27.39	1.00	2.28
2	11.5	11.68	52	40.00	9.750	45.85	1.62	28.35	29.50	0.80	1.81
3	12.7	12.94	52	42.00	9.750	42.00	1.58	29.86	27.81	0.92	2.09
4	11.5	11.68	52	44.00	9.750	43.95	1.57	28.19	30.34	0.71	1.62
5	12.7	12.94	52	46.00	9.750	42.00	1.50	27.97	28.12	0.79	1.79
6	12.0	12.21	52	52.00	9.750	44.22	1.48	30.26	31.43	0.64	1.47
7	14.7	15.08	52	58.00	9.750	36.69	1.31	27.89	29.14	0.87	1.97
8	14.7	15.09	52	58.00	9.750	36.69	1.31	27.99	29.14	0.87	1.97
9	13.5	13.80	52	60.00	9.750	39.71	1.30	30.65	31.90	0.71	1.61
10	13.6	13.80	52	60.00	9.750	39.71	1.30	30.65	31.80	0.71	1.61
11	14.8	15.19	52	62.00	9.750	36.46	1.25	29.19	30.34	0.83	1.68
12	14.8	15.19	52	62.00	9.750	36.46	1.25	29.19	30.34	0.83	1.68

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Fig. 364 FIGS 361A and

3671B



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D .etc.

Notch size in mirror	TG (122/189) 3.5 mm x 5.1 m (3.5 mm x 6.5 mm at disk)	Design	Collection	Area (Includes notch loss of scan line)	Beam speed at center of scan line (Inches/sec.)	Beam speed at max depth of field (Inches/sec.)	Beam speed at min depth of field (Inches/sec.)	Beam skew angle (degree)	Facet count function 1 = facet 0 = no facet	Number of facets 12	Angle A - Angle B (Absolute value) (degrees)	Bandwidth
2.27	11052	13704	8400	0	1	0.914	0.560	0.354	14.00			
1.81	10150	12798	7502	0	1	0.853	0.500	0.353	12.00			
2.08	10895	13468	8321	0	1	0.898	0.555	0.343	10.00			
1.63	9959	12429	7296	0	1	0.839	0.486	0.343	8.00			
1.78	10383	12835	7930	0	1	0.886	0.529	0.327	4.00			
1.47	9344	11929	7158	0	1	0.795	0.477	0.318	0.00			
1.97	10492	12634	8351	28	1	0.842	0.557	0.266	6.00			
1.97	10492	12634	8351	-28	1	0.842	0.557	0.286	6.00			
1.62	9324	11640	7407	28	1	0.776	0.494	0.292	8.00			
1.62	9324	11640	7407	-28	1	0.776	0.494	0.292	8.00			
1.88	10088	12108	8027	28	1	0.807	0.535	0.272	10.00			
1.88	10088	12108	8027	-28	1	0.807	0.535	0.272	10.00			

F164. 3692

P165. 3692A and 3692B

NOTE: If any entry in these two columns is less than 0.5 degrees
(highlighted in red), the corresponding B angle should be changed.
This is accomplished by modifying the "Distance from rotational axis"
entry for that line (cells G46 to G85).



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Figs. - 3H1 through 3H3



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Fig. 3I
Hg. 3I | and 3II



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*** Analysis of the Focus Shift and Out-of-focus Spot Size for Converging Reference Beam ***

(Not applicable for Stratos)

Convergence of the reference beam:

Focal length of parabolic mirror:

Distance from parabolic mirror to detector:

Design Par. Mirror Required foc. length (mm)

Facet Focal length (mm)

Facet Eff. width (mm)

Facet

			Object distance (mm)	Image distance (mm)	Image shift (mm)	Spot size at detector (mm)	
1	317.50	40	404.42	16858.75	59.05	-0.95	0.64
2	262.10	40	364.09	31841.43	58.71	-1.29	0.58
3	322.58	40	412.69	11828.19	58.11	-0.89	0.60
4	262.10	40	364.09	31841.43	58.71	-1.29	0.58
5	322.58	40	412.69	11828.19	59.11	-0.89	0.60
6	304.80	40	384.03	48230.76	58.89	-1.11	0.75
7	373.38	40	499.67	4985.04	59.60	-0.40	0.27
8	373.38	40	499.67	4485.04	59.60	-0.40	0.27
9	342.90	40	446.55	6618.26	59.33	-0.67	0.45
10	342.90	40	446.55	6818.29	59.33	-0.67	0.45
11	375.92	40	501.43	4976.16	59.62	-0.39	0.25
12	375.92	40	504.23	4975.15	59.62	-0.38	0.25

Distance (Cell E621) may have to be adjusted
so that the maximum spot size at the detector is
approximately the same when the 1/2 depth of field value
is negative as it is when the 1/2 depth of field value is positive.
(The 1/2 depth of field value is located at Cell G19)

Fig. 3J

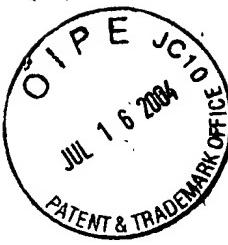
FIGS. 351 and 352



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CDRH/IEC Calculations to Verify that the Scanner Meets IEC 60825-1 Class Requirements ***					
The number of overlapping lines ($N_{overlap}$) must be determined from the scanner data.					
A safe assumption for our scanners is to consider that two scan lines are overlapped					
ONLY when the difference between their diffraction angles (θ) is less than 2 degrees.					
All else being equal, the slowest scan lines (largest angle θ) will be the worst case scan lines.					
N-overlap:	1				
Motor speed (rpm):		5200			
Alpha-min (radians):		0.0015 (from standard)			
FWHM P-divergence of laser (deg.):		8 (Linked from Trnc spreadsheet)			
FWHM S-divergence of laser (deg.):		30 (Linked from Trnc spreadsheet)			
Focal length of collimating lens (mm):		6.1 (Linked from Trnc spreadsheet)			
Angle of Incidence at MF plate (deg.):		29.23			
X-p (mm):		42.12			
X-s (mm):		0.87			
Average source dimension (mm):		3.93			
Distance to aperture (mm):		2.40			
Alpha (radians):		200 (actual distance or 200 mm, whichever is greater)			
C6:		0.012			
		7.996			
Laser power					
at window					
(mW)					
Facet					
time at					
d = 200 mm					
actual d					
(seconds)					
t_l (200)					
7 mm transit					
P x t_l					
(Joules)					
Facet count					
1	0.86	3.95856E-05	3.95856E-05	0.0000339	1
2	0.86	3.96549E-05	3.96549E-05	0.0000341	1
3	0.86	4.08001E-05	4.08001E-05	0.0000351	1
4	0.86	4.08316E-05	4.08315E-05	0.0000352	1
5	0.86	4.28115E-05	4.28115E-05	0.0000370	1
6	0.87	4.40086E-05	4.40086E-05	0.0000381	1
7	0.87	4.90358E-05	4.90358E-05	0.0000425	1
8	0.87	4.90358E-05	4.90358E-05	0.0000425	1
9	0.87	4.96126E-05	4.96126E-05	0.0000430	1
10	0.87	4.96126E-05	4.96126E-05	0.0000430	1
11	0.87	5.14525E-05	5.14525E-05	0.0000446	1
12	0.87	5.14525E-05	5.14525E-05	0.0000446	1

FIG. 3L1
FIG. 3L1A and 3L1B

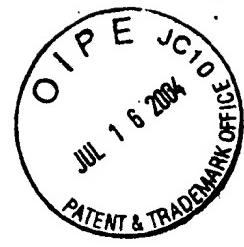


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F16S. 3L2A and
3L2B

Sum:		0.000459213	Duty/Cycles:	0.000459213	Pavg is the sum of the overlap $P_{I1} \times t_1$ products divided by the sum of the times (times the duty cycle). These values are the sum of the worst case (largest) overlap values.
CDRH calculations and results					Pavg is, therefore, the sum of the overlap $P_{I1} \times t_1$ products times the rps of the motor.
Pavg (mW):	0.0003869				
P (single pulse) (mW): (Maximum allowed)	8.27				
P (single pulse) (Actual)	0.87	YES			
IEC calculations and results					
IEC condition A (Single pulse)					PASS/FAIL
P (single pulse) (mW): (Maximum allowed)	70.6				PASS
IEC condition B (average power in a 0.25 second pulse train)					PASS/FAIL
Pavg allowed (mW):	7.92				PASS
Pavg scanner (mW):	0.0039				PASS
IEC condition C (pulse train correction factor) (For this calculation, you need to insert the sum of the pulse times in the overlapping scan lines)					
T-total (seconds): (sum of pulse times in overlap scan lines)	0.000051				
Pmax (mW):	66.1				
Number of pulses in train:	21.67				
Correction factor:	0.4635				PASS/FAIL
Pmax (P ^c corrected)(mW):	30.93				PASS
Pw (including overlap)	0.87				

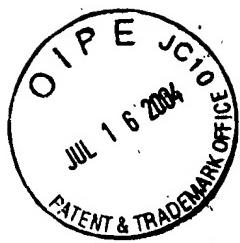


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	N	O	P	Q	R	S	T	U	V	W	X
46	Face1		1								
47	x	y	z								
48	-0.616	0.000	0.788								
49	End				Middle						End
50	x	y	z	x	y	z	x	y	z		
51	0.788	0.000	0.616	0.788	0.000	0.616	0.741	-0.367	0.562		
52	-0.140	0.000	-0.990	-0.140	0.000	-0.990	-0.117	-0.367	-0.923		
53	-0.595	0.448	0.667	-0.595	0.448	0.667	-0.590	0.098	0.801		
54											
55											
56	Mirror 1 Corners			Mirror 2 Corners			Mirror 3 Corners				
57	x	y	z	x	y	z	x	y	z		
58	3.750	-1.600	2.509	3.000	0.000	-0.112					
59	5.100	-2.400	1.728	4.800	0.000	0.382					
60	5.100	2.400	1.728	5.071	-2.256	1.066					
61	3.750	1.600	2.509	5.071	-2.256	1.066					
62				3.060	-1.000	0.175					
63											
64											
65											
66											
67											
68											
69	This station uses a spill mirror for mirror #2. The second part of mirror 2 is the above										
70											
71				3.000	0.000	-0.112					
72				4.800	0.000	0.382					
73				5.071	2.256	1.066					
74				5.071	2.256	1.066					
75				3.060	1.000	0.175					
76											

F1G. 6D2

-Station 2-



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	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ
46	Face1	2									
47	x	y	z								
48	-0.616	0.000	0.798								
49	End										
50	x	y	z	x	y	z	x	y	z		
51	0.766	0.000	0.643	0.766	0.000	0.643	0.711	-0.395	0.581		
52	-0.175	0.000	-0.985	-0.175	0.000	-0.985	-0.149	-0.395	-0.907		
53	-0.623	0.440	0.647	-0.623	0.440	0.647	-0.614	0.062	0.787		
54											
55											
56	Mirror 1 Corners			Mirror 2 Corners			Mirror 3 Corners				
57	x	y	z	x	y	z	x	y	z		
58	3.750	-1.600	2.509	3.000	0.000	-0.112					
59	5.100	-2.400	1.728	4.800	0.000	0.382					
60	5.100	2.400	1.728	5.071	-2.256	1.068					
61	3.750	1.600	2.509	5.071	-2.256	1.068					
62				3.060	-1.000	0.175					
63											
64											
65											
66											
67											
68											
69	This station uses a split mirror for mirror #2. The second part of mirror 2 is the above stations.										
70											
71											
72											
73											
74											
75											
76											

Fig. 6D3

Station-2



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	A	B	C	D	E	F	G	H	I	J	K	L
46	Low Elevation		Facet	3								
47		x	y	z								
48	Vector from Module	-0.616	0.000	0.768								
49		End										
50		x	y	z	x	y	z	x	y	z		
51	Output Vectors From Disk	0.743	0.000	0.669	0.743	0.000	0.669	0.697	-0.362	0.619		
52	First Mirror Reflected Directions	-0.209	0.000	-0.978	-0.209	0.000	-0.978	-0.189	-0.362	-0.913		
53	Second Mirror Reflected Directions	-0.649	0.433	0.625	-0.649	0.433	0.625	-0.648	0.089	0.757		
54	Third Mirror Reflected Directions											
55												
56					Mirror 1 Corners			Mirror 2 Corners			Mirror 3 Corners	
57		x	y	z	x	y	z	x	y	z	x	y
58	1	3.750	-1.600	2.509				3.000	0.000	-0.112		
59	2	5.100	-2.400	1.728				4.800	0.000	0.382		
60	3	5.100	-2.400	1.728				5.071	-2.256	1.066		
61	4	3.750	1.600	2.509				5.071	-2.256	1.066		
62	5							3.060	-1.000	0.175		
63	6											
64	7											
65	8											
66												
67												
68												
69	Note: Special Case!	This station uses a split mirror for mirror #2. The second part of mirror 2 is the above.										
70												
71	Second Part of Mirror 2							3.000	0.000	-0.112		
72								4.800	0.000	0.382		
73								5.071	2.256	1.066		
74								5.071	2.256	1.066		
75								3.060	1.000	0.175		
76												
77												

Station-2

Fig. 6D4



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	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV
46	Facet	4									
47	x	y	z								
48	-0.616	0.000	0.788								
49	End			Middle					End		
50	x	y	z	x	y	z	x	y	z	x	y
51	0.719	0.000	0.695	0.719	0.000	0.695	0.684	-0.395	0.635		
52	-0.243	0.000	-0.970	-0.243	0.000	-0.970	-0.220	-0.395	-0.892		
53	-0.675	0.425	0.603	-0.675	0.425	0.603	-0.688	0.046	0.742		
54											
55											
56	Mirror 1 Corners			Mirror 2 Corners			Mirror 3 Corners				
57	x	y	z	x	y	z	x	y	z		
58	3.750	-1.600	2.509	3.000	0.000	-0.112					
59	5.100	-2.400	1.728	4.800	0.000	0.382					
60	5.100	2.400	1.728	5.071	-2.256	1.066					
61	3.750	1.600	2.509	5.071	-2.256	1.066					
62				3.080	-1.000	0.175					
63											
64											
65											
66											
67											
68											
69	This station uses a split mirror for mirror #2. The second part of mirror 2 is the above table.										
70											
71							3.000	0.000	-0.112		
72							4.800	0.000	0.382		
73							5.071	2.256	1.066		
74							5.071	2.256	1.066		
75							3.080	1.000	0.175		
76											

FIG. 605

Station 2-



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	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH
46	Facet		5								
47	x	y	z								
48	-0.616	0.000	0.788								
49	End			Middle							
50	x	y	z	x	y	z	x	y	z		
51	0.689	0.000	0.743	0.669	0.000	0.743	0.634	-0.311	0.708		
52	-0.310	0.000	-0.951	-0.310	0.000	-0.951	-0.298	-0.311	-0.903		
53	-0.724	0.407	0.557	-0.724	0.407	0.557	-0.730	0.114	0.673		
54											
55											
56	Mirror 1 Corners			Mirror 2 Corners			Mirror 3 Corners				
57	x	y	z	x	y	z	x	y	z		
58	3.750	-1.860	2.509	3.000	0.000	-0.112					
59	5.100	2.400	1.728	4.800	0.000	0.382					
60	5.100	2.400	1.728	5.071	2.256	1.066					
61	3.750	1.860	2.509	5.071	-2.256	1.066					
62				3.060	-1.000	0.175					
63											
64											
65											
66											
67											
68											
69	This station uses a split mirror for mirror #2. The second part of mirror 2 is the above stations.										
70											
71					3.000	0.000	-0.112				
72					4.800	0.000	0.382				
73					5.071	2.256	1.066				
74					5.071	2.256	1.066				
75					3.060	1.000	0.175				
76											

Station 2

Fig. 6D6



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	BU	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX
46	Facet	6													
47	x	y													
48	-0.616	0.000	0.798												
49	End														
50	x	y	z	x	y										
51	0.616	0.000	0.798	0.616	0.000	0.798									
52	-0.376	0.000	-0.927	-0.376	0.000	-0.927									
53	-0.770	0.387	0.508	-0.770	0.387	0.508									
54															
55															
56	Mirror 1 Corners			Mirror 2 Corners			Mirror 3 Corners								
57	x	y	z	x	y	z	x	y	z						
58	3.750	-1.600	2.509	3.000	0.000	-0.112									
59	5.100	-2.400	1.728	4.890	0.000	0.382									
60	5.100	2.400	1.728	5.071	-2.256	1.066									
61	3.750	1.600	2.509	5.071	-2.256	1.066									
62				3.060	-1.000	0.175									
63															
64															
65															
66															
67															
68															
69	This station uses a split mirror for mirror #2. The second part of mirror 2 is the above mirrored about the y axis. i.e.:														
70															
71				3.000	0.000	-0.112									
72				4.800	0.000	0.382									
73				5.071	2.256	1.066									
74				5.071	2.256	1.066									
75				3.060	1.000	0.175									
76															

F1G. 6D7

-Station 2

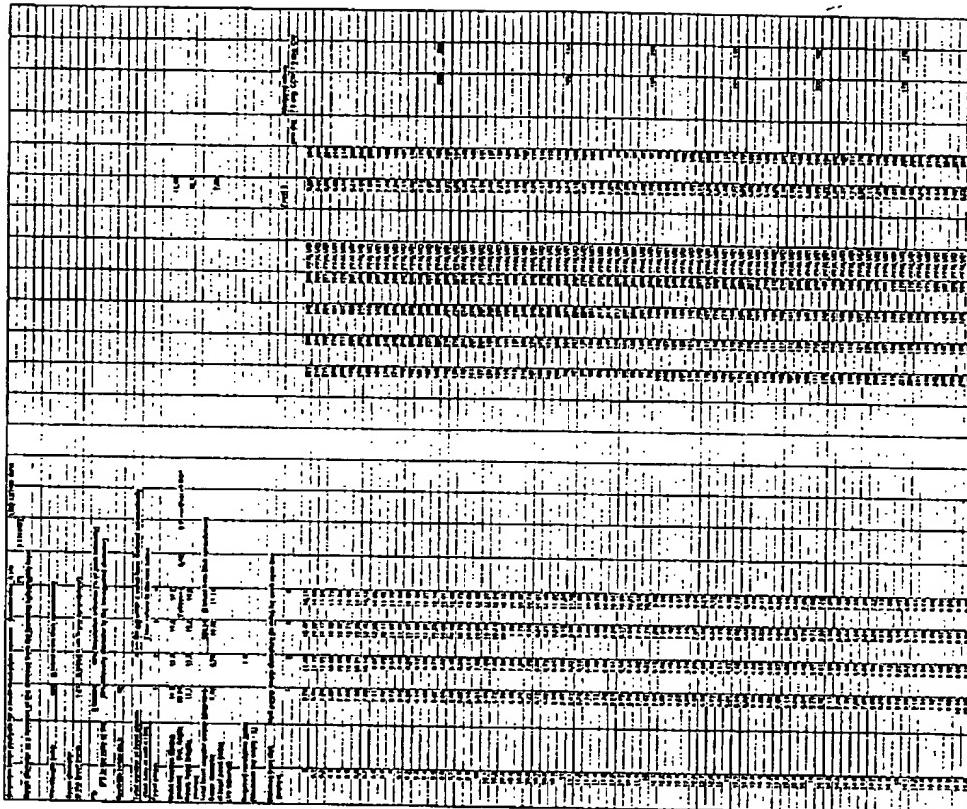


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~~Figs.~~ A through q_c



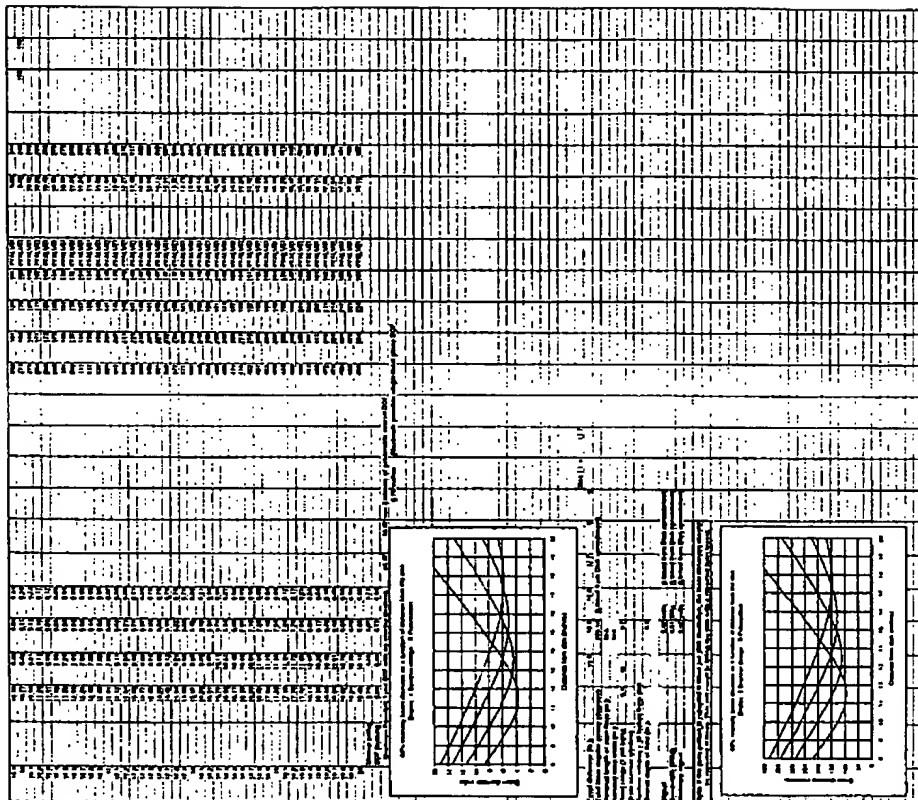
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~~FIGS. 11B1A through 11B14~~



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FIGS. 11B2A through
11B2Z

FIGS. 11B2A through
11B2E



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	A	B	C	D	E	F	G	H	I	J	K	L	M
	Face1												Face2
106													
107	G3												
108													
109													
110													
111													
112													
113													
114													
115													
116													
117													
118													
119													
120													

476+3A3 Flgs. 13A3A and
13A3B

MR1

Station 1



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	A	B	C	D	E	F	G	H	I	J	K	L	M
					Facei						Facei		
108													
107	G3												
108													
108	1												
108	4.36845	2.65378	0.19632	4.13039	2	2.57339	0.16458	3.88297	3	2.57127	0.13136	3.63985	4
108	4.22028	2.62278	0.17673	3.98981		2.54937	0.14541	3.72893		2.54556	0.10957	2.49816	
108	Point 1												
110	4.17479	2.80929	0.18686	3.98888		2.55291	0.14522	3.69351		2.68161	0.10205	3.48464	2.46924
111	3.78748	2.62732	0.11517	3.58353		2.46110	0.09002	3.26114		2.51989	0.04122	3.13271	2.40974
112	3.59708	-1.8946	0.16625	3.42901		-1.80124	0.14108	3.10957		-1.84718	0.09718	3.0325	-1.79742
113	4.00140	-2.16822	0.22737	3.86105		-1.97327	0.20449	3.58313		-2.08109	0.116749	3.40752	-1.93922
114	4.08110	-1.99338	0.23359	3.86230		-1.97181	0.20480	3.62849		-1.96392	0.117186	3.40752	-1.93923
115	4.22016	-2.04815	0.25587	4.01328		-2.03180	0.22675	3.80182		-2.02808	0.19711	3.57630	-1.99471
116	4.36945	-2.65376	0.19632	4.13039		2.57939	0.16456	3.89207		2.57127	0.13136	3.63985	2.49916
117	Start of scan line												
118	4.40361	1.81092	0.21487	4.17745		1.84317	0.16366	3.94222		1.82246	0.15114	3.70025	1.80404
119	4.29870	0.23013	0.22796	4.10000		0.25000	0.20000	3.89313		0.27090	0.17070	3.6774	0.29297
120	4.36920	-1.28070	0.25535	4.10701		-1.28789	0.22778	3.89254		-1.26987	0.19685	3.66999	-1.27076

Figs. 13B3A and

13B3B

Station 1

MR2



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Line	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1																			
101	Face1																		
102	Face1																		
103	Point 1	5.04006	0.94116	1.75314	0.55167	1.94170	0.49414	1.81987	0.49573	1.86881	0.53894	1.86881	0.53894	1.86881	0.53894	1.86881	0.53894	1.86881	
104	Point 2	4.87042	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	0.44428	
105	Point 3	4.81173	0.66203	1.88350	1.91057	0.47110	1.91057	0.47110	1.88350	0.66203	1.88350	0.66203	1.88350	0.66203	1.88350	0.66203	1.88350	0.66203	
106	Point 4	4.82129	0.26599	2.17873	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	0.24022	
107	Point 5	4.94770	-1.64945	2.18517	-1.86771	-2.20984	-4.08721	-1.77102	-2.31400	-4.12497	-1.92124	-2.29225	-3.74198	-1.48946	-2.31388	-3.79119	-1.27109	-2.49419	
108	Point 6	4.77772	2.23610	1.91714	4.71126	2.17652	1.94684	4.58410	2.15769	2.03834	4.49172	2.17143	2.03019	4.30150	2.19018	4.13933	-1.47056	2.86392	
109	Point 7	4.85579	2.04738	1.68123	4.72349	2.17219	1.94731	4.69568	2.01169	2.01372	4.49172	2.17143	2.03019	4.30012	2.18924	4.13933	-1.47056	2.86392	
110	Point 8	4.86276	2.15963	1.79826	4.88407	2.27709	1.86480	4.76563	2.11752	1.92182	4.64489	2.21578	1.98174	4.48021	2.16685	4.22687	-1.57981	2.77351	
111	Point 9	5.04006	0.92476	1.76314	4.94478	0.55187	1.81987	4.85721	0.53894	0.53894	4.76446	0.51109	1.92421	4.59494	0.54099	2.00051	4.42056	0.60353	
112	Start of scan line	5.02026	0.00000	1.77422	4.92326	0.00000	1.82778	4.53795	0.00000	1.86000	4.74968	0.00000	1.93105	4.57908	0.00000	2.00062	4.41147	0.00000	
113	Middle of scan line	5.02026	0.00000	1.77422	4.92326	0.00000	1.82778	4.53795	0.00000	1.86000	4.74968	0.00000	1.93105	4.57908	0.00000	2.00062	4.41147	0.00000	
114	End of scan line	5.00005	-1.14462	1.76126	4.88555	-2.22689	1.80753	4.85452	-1.69333	1.87053	4.76301	-1.19817	1.92507	4.37039	-0.88337	2.10470	4.40142	-0.84218	
115																			

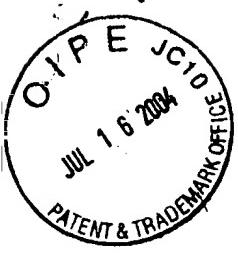
FIG. 14A1 FIGS. 14A1A and
14A1B



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	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	Point	
102																			
103																			
107 CS																			
108	4.82198	0.44237	0.86978	2	-0.65503	0.44811	0.022157	4.49179	0.44459	0.77770	4.30776	0.44954	0.12583	3.50352	0.44854	0.02494	3.52125	0.44851	
109	4.86874	0.38593	0.34652	4.50103	0.373945	0.19244	4.31949	0.37152	0.15017	4.14124	0.37427	0.10044	3.74587	0.37525	0.01074	3.73538	0.37525		
110	4.82719	0.54811	0.45022	4.18746	0.37701	0.18326	4.28911	0.44536	0.11104	4.14124	0.31427	0.10044	3.74516	0.37503	0.00833	3.73508	0.37503		
111	4.18942	0.227653	0.15599	4.04852	0.15472	0.13271	3.7956	0.26217	0.20117	3.65224	0.20255	0.19485	3.17735	0.19541	-0.08658	2.88195	0.24084		
112	4.29176	-2.24586	0.84628	4.17449	-2.32513	0.93655	3.89127	-2.28907	0.14453	3.69183	-2.41913	0.78826	3.08187	-2.00035	0.50656	3.10607	-1.64117		
113	4.86916	2.48267	1.62857	4.89519	2.48833	0.88272	4.37431	2.48821	0.88268	4.25097	2.52954	0.91468	3.98517	2.15650	0.70794	3.47166	0.36043		
114	4.74116	2.30559	0.98534	4.39827	-2.48489	0.98200	4.41150	-2.33743	0.90866	4.25097	-2.52954	0.91468	3.98683	2.15168	0.70794	3.47166	0.48974		
115	4.389443	-2.35176	1.04332	4.7009	-3.15134	1.04484	4.57811	-2.38443	0.98529	4.41114	-2.57881	0.97153	4.06539	2.20459	0.70794	3.47166	-0.48943		
116	4.302198	0.44237	0.38976	4.63530	0.44811	0.22157	4.49179	0.44459	0.77770	4.30776	0.44954	0.12583	3.50352	0.44854	0.02494	3.52125	0.44851		
117	4.352442	0.00000	0.38906	4.686440	0.00000	0.34539	4.50000	-0.00001	0.00000	4.23201	0.00000	0.29374	3.08187	0.00000	0.00000	3.56587	0.00000		
118	4.352442	0.00000	0.38907	4.686440	0.00000	0.34539	4.50000	-0.00001	0.00000	4.23201	0.00000	0.29374	3.08187	0.00000	0.00000	3.56587	0.00000		
119	4.824361	-1.51167	0.62998	4.40210	-1.65515	0.62997	4.52168	-1.53867	0.62997	4.47785	-1.71403	0.73599	4.08537	-1.40003	0.64628	3.97905	-0.00000	0.04389	
120																			

Fig. 14B1 Figs. 14B1A and
14B1B



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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	Face				Face				Face				Face			Face		
108	107 (G)																	
109	108 (H)																	
110	Point 1	-0.442327	0.269760	4.484563	0.229151	0.229151	0.491198	0.44559	0.30770	-0.17770	-0.40775	0.121565	0.329852	0.416364	0.026565	3.55715	0.44891	
111	Point 2	4.689724	0.365950	0.246502	-0.501020	0.375245	0.19594	0.31959	0.37102	0.59017	4.14124	0.10944	3.74647	0.10944	0.00784	0.373885	0.373722	-0.12337
112	Point 3	0.82719	0.946111	0.19745	4.50022	0.377701	0.19826	0.29591	0.45535	0.11104	4.14124	0.10944	3.74516	0.10944	0.009503	0.373803	0.373596	0.12337
113	Point 4	4.189492	0.227763	0.15472	4.046852	0.152599	0.13371	0.379812	0.201447	0.052524	3.763549	0.203355	0.042485	3.17535	0.15541	0.015541	2.96166	0.24084
114	Point 5	4.29179	-2.245983	0.848266	4.17480	2.225153	0.639455	3.907277	-2.24597	0.74455	3.89189	-2.41913	0.639455	3.291817	-2.00005	0.304954	3.10687	0.164117
115	Point 6	4.681137	-2.962517	1.02507	4.55519	-2.484653	0.589272	4.27421	-2.45521	0.862298	4.26092	-2.539845	0.61466	3.98017	-2.164920	0.101094	2.47166	-1.7481
116	Point 7	4.747116	-2.305330	4.598327	4.598327	-2.36498	0.589272	4.27421	0.862298	0.589272	4.26092	-2.539845	0.61466	3.88651	-2.151565	0.107172	2.151565	-0.48974
117	Point 8	0.852652	-2.35778	1.04332	4.740259	-2.31941	1.04464	4.576111	-2.38449	0.963269	4.411114	-2.37781	0.97163	4.085339	-2.204079	0.77539	3.68342	-1.81036
118	Point 9	4.624058	0.44237	0.00000	4.855033	0.44237	0.00000	0.22157	0.49119	0.44459	0.17770	0.49554	0.12285	0.449334	0.12285	0.02505	3.52125	0.44891
119	Start of Acn line	4.624442	0.00000	0.00000	4.869490	0.00000	0.00000	0.343238	4.50000	-0.00001	0.30000	0.25001	0.00000	0.15325	0.00000	0.00000	3.56887	0.04393
120	Middle of Acn line	4.624442	0.00000	0.00000	4.869490	0.00000	0.00000	0.343238	4.50000	0.00000	0.30000	0.25001	0.00000	0.15325	0.00000	0.00000	3.56887	0.04393
	End of Acn line	4.95331	-1.51167	0.526595	4.60210	-1.85515	0.128687	4.62166	-1.53817	0.128687	4.62166	-1.74615	0.15565	4.05337	-1.40051	0.56426	3.67665	-1.08974

Fig. 14C1 Figs. 14C1A and

14C1B



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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	Face1																	
106																		
107	Co																	
108																		
109	Point 1	4.82498	0.44237	0.88719	4.85593	0.44491	0.22357	4.49179	0.44459	0.17770	4.30715	0.44494	0.12805	3.92125	0.44491	-0.08594		
110	Point 2	4.68874	0.39553	0.39552	4.59132	0.39554	0.31949	4.31949	0.39552	0.31949	4.14124	0.37427	0.10044	3.74941	0.37345	-0.09764	0.12537	
111	Point 3	4.62719	0.34611	0.34611	4.50102	0.34611	0.19626	4.29911	0.34626	0.11164	4.14124	0.31427	0.10044	3.74941	0.31427	-0.09853	0.13522	
112	Point 4	4.18842	0.22763	0.15472	4.04652	0.15286	0.1377	3.78162	0.20137	0.09244	3.76559	0.20035	0.02315	3.74941	0.15451	-0.05656	0.12317	
113	Point 5	4.29179	-2.24508	0.34326	4.17489	-2.32513	0.34385	3.80727	-2.29507	0.14453	3.88193	-2.41913	0.08226	3.29167	-2.08035	0.58855	1.84117	
114	Point 6	4.69161	-2.49237	1.02367	4.59519	-2.46583	0.99272	4.37431	-2.45821	0.89226	4.25097	-2.52953	0.69168	3.68517	-2.18530	0.10794	3.47168	
115	Point 7	4.74719	-2.39530	0.86034	4.59862	-2.46498	0.86000	4.41150	-2.33743	0.90688	4.25097	-2.52953	0.91468	3.68517	-2.15186	0.07112	3.47168	
116	Point 8	4.89493	-2.35176	1.04322	4.74699	-2.51341	1.04694	4.57611	-2.38443	0.86828	4.41114	-2.57081	0.97160	4.08039	-2.20478	-0.07136	0.58493	
117	Point 9	4.92498	0.44237	0.58778	4.85593	0.44811	0.22349	4.49179	0.44459	0.17770	4.30715	0.44494	0.12805	3.92125	0.44491	-0.08594	0.04390	
118	Start of scan line	4.82442	0.00000	0.38598	4.88490	0.00000	0.34326	4.50000	0.00000	0.34326	4.32901	0.00000	0.15325	3.56889	0.00000	0.00000	0.04390	
119	Middle of rotation	4.82442	0.00000	0.38598	4.88490	0.00000	0.34326	4.50000	0.00000	0.34326	4.32901	0.00000	0.15325	3.56889	0.00000	0.00000	0.04390	
120	End of scan line	4.84591	-1.61167	0.82698	4.80210	-1.63515	0.82698	4.82188	-1.53817	0.44860	4.47183	-1.71403	0.17509	4.08039	-1.40033	0.67805	-0.09574	0.57050

Fig. H4D1 Aigs. H4D1A and
H4D1B



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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
	Front			Front			Front											
105																		
107	03																	
108																		
109																		
110																		
111																		
112																		
113																		
114																		
115																		
116																		
117																		
118																		
119																		
120																		

Fig. 15A3 Figs. 15A3A and

15A3B



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FIG. 15B3 FIGS. 15B3A AND

115 B3 B



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Figs. 15c³A and 15c³B

15C3B



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A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S			
	Point			Point			Point			Point			Point		Point		Point				
105				Point 1			Point 2			Point 3			Point 4			Point 5					
107	GC1			Point 1	7.38483	0.36821	7.31659	0.35437	7.31659	0.36259	7.29212	0.36259	7.16887	0.35054	7.03509	0.35054	6.97159	0.34512	6.926544		
108				Point 1	3.00327	3.20677	3.17018	0.29546	3.17226	0.29546	2.70104	0.29320	4.16642	7.13200	0.29102	4.39778	6.97589	0.30016	6.81701	0.28708	
109				Point 1	7.33868	0.36821	7.32286	0.29546	7.27104	0.29546	7.20569	0.29546	4.19194	7.13200	0.29102	4.39778	6.97589	0.30016	6.81701	0.28708	
110				Point 1	7.35068	0.45214	7.16546	0.35274	7.30527	0.35274	7.05669	0.35274	4.19194	7.13200	0.29102	4.39778	6.97589	0.30016	6.81701	0.28708	
111				Point 1	7.19868	0.19098	7.13404	0.05935	7.12207	0.05935	7.04522	0.05935	4.57132	7.02005	0.15944	4.65313	6.81701	0.15458	6.72149	0.16444	
112				Point 1	7.19868	0.21118	7.13404	0.05935	7.12207	0.05935	7.04522	0.05935	4.57132	7.02005	0.15944	4.65313	6.81701	0.15458	6.72149	0.16444	
113				Point 1	6.78165	2.71118	6.26539	0.18549	6.18549	0.18549	6.81109	0.18549	4.77010	6.85131	2.86726	4.25271	6.81701	2.86040	6.72149	2.86999	
114				Point 1	6.82323	2.87144	6.35619	0.35118	6.35619	0.35118	6.81109	0.35118	4.77010	6.85131	2.86726	4.25271	6.81701	2.86040	6.72149	2.86999	
115				Point 1	6.86198	2.78759	6.31128	0.37703	6.35459	0.37703	6.71818	0.37703	3.17860	6.61699	3.02659	3.98692	6.47758	2.91719	4.49112	6.28421	-3.12592
116				Point 1	6.88944	2.80448	6.31407	0.37862	6.78952	0.37862	6.79507	0.37862	3.40022	6.79507	3.04610	3.94675	6.51463	2.92743	4.43077	6.32024	-3.16308
117				Point 1	7.38483	0.36821	7.30527	0.29546	7.31659	0.29546	7.20569	0.29546	4.00001	7.17689	0.33024	4.28773	7.03509	0.35681	6.87159	0.34512	
118				Start of arc line	7.32252	0.00000	3.37245	0.00056	7.25369	0.00056	7.19846	0.00056	4.00001	7.12389	-0.00002	4.22381	6.97589	0.00007	6.82144	0.00008	
119				Middle of arc line	7.32252	0.00000	3.37245	0.00056	7.25369	0.00056	7.19846	0.00056	4.00001	7.12389	-0.00002	4.22381	6.97589	0.00000	6.82144	0.00000	
120				End of arc line	7.01771	2.11473	3.35172	0.92429	3.11650	0.92429	3.11650	0.92429	4.14654	6.77390	3.04644	3.35386	6.61699	-3.26703	4.46311	-3.30435	

F14. 15D3
Plgs. 15D3A and
15D3B